

I claim:

1. A dot matrix display design tool, comprising:

a font designer for creating a character set comprising a plurality of characters and a character design associated with each of the characters, the character design comprising a pattern of selected and deselected pixel positions in a matrix of pixel positions, the font designer creating each character design in response to selections made by a user, the font designer further allowing the user to save and delete characters as desired; and

a display designer including a display emulator comprising a text input entry interface for text input by a user and a character set selection interface to allow user selection of character set for displaying the text, the display designer further including a text display to allow display of the input text in a format reflecting the selected character set, the display designer further including a set of editing tools to allow modification of the display in response to selections made by a user.

2. The design tool of claim 1 further comprising a display viewer for emulating a dot matrix display, the display viewer being operative to receive input text and a character set selection, the display viewer being further operative to display the input text in a format reflecting the character set selection, the display viewer being further operative to simulate additional characteristics of a dot matrix display in displaying the input text, the display viewer being further operative to modify the additional characteristics in response to user selections.

3. The design tool of claim 2 wherein the display emulator is a first display emulator and the display designer further comprises a second display emulator, the first and second display emulators allowing the user to simultaneously view first and second text entries and to view results of independent selections and modifications relating to the first and second text

entries.

4. The design tool of claim 3 wherein the font designer comprises a dot matrix designer comprising an array of pixel positions to be selected or deselected by the user, the font designer allowing user selection of each of a plurality of characters and allowing the user to select use the dot matrix designer to select or deselect pixel positions to create an array of pixels to be associated with the selected character.

5. The design tool of claim 4 wherein the font designer allows user specification of a character size to be associated with a character set and wherein the font designer sets dimensions of the array of pixel positions according to the character size specified by the user.

6. The design tool of claim 5 wherein the editing tools allow specification of contrast, pixel size, spacing between rows of pixels and spacing between columns of pixels.

7. The design tool of claim 6 wherein the display viewer allows storage of a set of messages and cycling between the messages at a rate selected by the user.

8. The design tool of claim 7 wherein the display viewer allows scrolling of a displayed message at a rate selected by the user.

9. The design tool of claim 8 wherein the display viewer includes a set of editing tools to allow modification of display characteristics, the editing tools allowing specification of interword spacing, intercharacter spacing and spacing surrounding punctuation characters.

10. A method of display design for a dot matrix display device comprising the steps of:

creating a character set design in response to user selection of each of a set of characters from a character list and specification of pixel values for the character in a matrix designer providing a visual model of an array of available pixel locations for the character; and

displaying a message using the selected character set design and modifying aspects of the design in response to user selections, the display of the message being immediately altered to reflect each user selection.

11. The method of claim 10 wherein the step of displaying a message includes displaying a first message simultaneously with a second message and independently modifying characteristics of each displayed message to allow comparison between the two displayed messages.

12. The method of claim 11 and further including displaying a representation of a hardware display unit using the character set design and modifying selected features of the representation in response to user selections, each modification being immediately displayed upon entry of a corresponding user selection.